JOB VACANCY NOTICE
Groundwater Modeler
(Hydrologist II III,IV
Geoscientist II,III,IV)

Apply Via Mail/Hand Delivery: Texas Water Development Board Stephen F. Austin Building, 1700 North Congress Ave., Room 670, Austin, Texas 78701 or via facsimile (512) 463-7644. Refer to Human Resources (512) 475-2142 Equal Opportunity Employer

Job Description

The groundwater modeler performs routine to complex hydrological/geoscience work in conjunction with groundwater modeling studies. Work involves reviewing and analyzing data; preparing and peer reviewing reports; performing and/or assisting with the construction of model files, performing routine to advanced model simulations, data extraction, interpretation, and documentation of model related data, analyses, and results. Works under moderate to minimal supervision with limited or considerable latitude for the use of initiative and independent judgment depending on experience.

Essential Job Functions

- Plans, organizes, and implements the acquisition of necessary water resources data to develop, run, analyze, and document numerical groundwater flow models and model simulations. This may entail proper documentation of source information; application of set processes; the use and manipulation of various programming scripts; analysis and interpretation of modeling results and water budgets; writing reports; providing presentations; and adhering to and developing quality assurance procedures.
- Assists with the preparation and review of technical groundwater reports.
- Researches and delivers written and verbal responses to public, inter, and intra-agency inquiries. May include presentations at public meetings summarizing modeling studies and simulations.
- Designs and implements regional and local geographical spatial analysis for groundwater studies.
- Depending on experience, may work on density driven groundwater flow evaluations.
- Performs related work as assigned.

Minimum Qualifications

- Graduation from an accredited four-year college or university with a bachelor's degree in Hydrology, Water Resources, Geology, Hydrogeology, Natural Resources, Engineering, or related field. Experience and education may be substituted for one another.
- Familiarity with water resources of Texas and an understanding of how groundwater is managed in Texas.

Preferred Qualifications

- Experience in groundwater modeling using MODFLOW and density flow modeling such as SEAWAT and is familiar with the Groundwater Availability Modeling Program
- Experience in developing and interpreting water budgets.
- Experience with GIS applications; prefer ArcGIS with knowledge of spatial analyst extension and exposure to geodatabase use and design.
- Experience with developing, using, or manipulating scripts for model data extraction or adjustments to model files.

Knowledge, Skills, and Abilities

- Knowledge of MODFLOW, numerical groundwater modeling techniques, and PEST (parameter estimation).
- Knowledge of basic hydrological and geological concepts, techniques, and analysis.
- Knowledge of water budget development and interpretation.
- Knowledge in developing and/or using commercial pre and post processors.
- Ability to plan projects and to apply hydrogeological concepts.

Texas Water Development Board

- Skill in the operation of Windows-based computers and software such as spreadsheets, database, and Word.
- Knowledge of programming including the ability/aptitude to acquire, manipulate, and develop water resources data in multiple formats and/or from various sources.
- Knowledge of geographic information system (GIS) and aptitude to visualize three-dimensionally.
- Ability to communicate effectively both verbally and in writing.
- Ability to be flexible, be an active team player, and demonstrate moderate initiative.

Remarks
- Copy of required official academic transcripts and/or licensures must be submitted at time of interview, if selected for interview. Failure to provide required documentation will result in no further consideration for employment.
- If applying for Geoscientist II to IV positions must be in good standing with the Texas Board of Professional Geoscientists and have a current, active Texas Board of Professional Geoscientists issued license to practice geoscience in Texas.
- Satisfactory driving records are required for driving state or personal vehicles and motor driven equipment to conduct agency business. Acceptable driving record must be presented at the time of interview.
- A written test will be administered as part of the interview process.